

# Riding the Digital Explosion

Brewster Kahle  
Sept 20, 1995  
GILS Conference



# Internet Evolution on Steroids

- ◇ 1990 Messaging (mail, netnews) but wanted searchable archives
- ◇ 1991 Db systems (WAIS) but wanted browsing
- ◇ 1992 Browsing & Db (Gopher) but wanted richer presentation
- ◇ 1993 Hypertext & Db (Web) but wanted programmable UI
- ◇ 1995 Mobile code (Java?) but...

**Constant need: Access to data from multiple systems**



# The Future of Information Technology

- ◇ Digital
- ◇ Personal
- ◇ Ubiquitous
- ◇ Multimedia: text -> video



# Communications Revolution: Digital Data

- ◇ Today the Internet: 56kb-1mb/sec
- ◇ Tomorrow:
  - Cable: 100stet/sec
  - CamCorders: 100kb/sec
  - Satellite Dishes: gb/sec



# Computer Revolution

- ◇ Today: desktop workstations,  
super mainframes
- ◇ Tomorrow: ubiquitous  
communications



# Data Revolution

- ◇ Today: newspapers, 100 channels of TV
- ◇ Tomorrow: merging TV, Telephone, and Databases
- ◇ Everyone is a publisher



# Making sense of it all

- ◇ Internal coordination
- ◇ Using external sources: standards standards standards



# Coming Problems

- ◇ Proprietary vs. open systems
- ◇ Infotainment -> Productivity tool
  - Cross server navigation: 52,000 is too many
  - Personalization
  - Packaged delivery



# GILS' Solution

- ◇ Put the government info behind the open systems.
- ◇ Don't invest in User Interface: make gov. databases available to all
- ◇ Post it once: HTTP, Gopher, Z39.50, Fax etc. from one DB
- ◇ Enable Active Clients: Towards Agents



# Interoperability with other systems

- ◇ Web, Java. . .
- ◇ Online Services: AOL, Microsoft Network, etc.
- ◇ Lotus notes
- ◇ Cable systems